Note to Contributors

Bacteriological Reviews is published under the auspices of the Society of American Bacteriologists to provide authoritative, critical surveys on the current status of subjects and problems in the diverse fields of microbiology. This includes the occasional short monograph.

Suggestions for timely reviews are solicited; prospective authors are invited to discuss with the Editor the suitability of their proposed manuscripts. The submittal of a synopsis or topical outline for an advisory opinion is recommended. Except for References the editorial style of Bacteriological Reviews is essentially the same as that of the Journal of Bacteriology; contributors should consult the Instructions to Authors published in each issue of the Journal for details. If the preliminary discussions result in a prospective review, the Editor will furnish a manual that summarizes style requirements and specific directions for preparation of manuscripts for Bacteriological Reviews. Each contributor should have this before preparing the final copy for submission. The following suggestions may serve as a general guide.

Plan and Content of Review. A rational, balanced development of the topic, rather than a chronological treatment, is to be preferred. Old history, if any, may be covered usually by simple reference to earlier reviews. A mere compilation or annotated bibliography does not adequately serve the objectives of this journal. The extensive presentation of new experimental material belongs properly in the domain of the monograph or of the appropriate "experimental" journal. Judicious selection of references is an important function of the reviewer. Each citation should be checked with the original publication to avoid embarrassing errors.

Length. The length of a paper is no measure of its quality, and it is only the latter that determines acceptability for publication. However, practical considerations make it desirable to set a provisional limit of 15 to 25 printed pages for a review, text, tables, figures and references included. (About 650-700 words per page; 28 references per page.) A short monograph must come within the size of a single issue, about 70 pages.

The acceptability of a review cannot, of course, be finally decided until the finished product has been examined. Acceptance of a short monograph, is also contingent upon the advice of the Editor of the Journal of Bacteriology.

Correspondence relating to editorial matters should be addressed to the Editor:

4 4 7. 3

Prof. Perry W. Wilson Department of Bacteriology University of Wisconsin Madison 6, Wis.

SUSTAINING MEMBERS

Society of American Bacteriologists

ABBOTT LABORATORIES	. North Chicago, Ill.
ALBIMI LABORATORIES	
A. S. ALOE COMPANYSt. Louis, M	
American Agar and Chemical Company	
AMERICAN CAN COMPANY	
AMERICAN CYANAMID COMPANY	
AMERICAN INSTRUMENT COMPANY, INCOR	,
IMPERICAN INSTRUMENT COMPANT, INCOM	Silver Spring, Md.
AMERICAN OPTICAL CO	
AMERICAN STERILIZER COMPANY	
ANHEUSER-BUSCH, INCORPORATED	
ARMOUR LABORATORIES	
BALTIMORE BIOLOGICAL LABORATORY	
BAUSCH AND LOMB OPTICAL COMPANY	
BECTON, DICKINSON AND COMPANY	
THE BORDEN COMPANY	
Bramhall, Deane Company	
Bristol Laboratories, Incorporated	
BUCKMAN LABORATORIES, INCORPORATED.	
BURROUGHS, WELLCOME AND COMPANY	
Cappel Laboratories	
CARWORTH FARMS, INCORPORATED	
CHILBAN IODINE EDUCATIONAL BUREAU, I	
CIBA PHARMACEUTICAL PRODUCTS, INCOM	RPORATED
CIBA PHARMACEUTICAL PRODUCTS, INCOM	RPORATED Summit. N. J.
CIBA PHARMACEUTICAL PRODUCTS, INCORTHE COCA COLA COMPANY	Summit, N. J
CIBA PHARMACEUTICAL PRODUCTS, INCORTHE COCA COLA COMPANY	Summit, N. JAtlanta, GaTerre Haute, Ind.
CIBA PHARMACEUTICAL PRODUCTS, INCOM THE COCA COLA COMPANY	Summit, N. J
CIBA PHARMACEUTICAL PRODUCTS, INCOME THE COCA COLA COMPANY COMMERCIAL SOLVENTS CORPORATION CORNING GLASS WORKS	Summit, N. J
CIBA PHARMACEUTICAL PRODUCTS, INCORTHE COCA COLA COMPANY. COMMERCIAL SOLVENTS CORPORATION CORNING GLASS WORKS CUTTER LABORATORIES DIFCO LABORATORIES, INCORPORATED	Summit, N. J
CIBA PHARMACEUTICAL PRODUCTS, INCORTHE COCA COLA COMPANY. COMMERCIAL SOLVENTS CORPORATION CORNING GLASS WORKS DIFCO LABORATORIES, INCORPORATED DIVERSEY CORPORATION	Summit, N. J. Atlanta, Ga. Terre Haute, Ind. Corning, N. Y. Berkeley, Calif. Detroit, Mich. Chicago, Ill.
CIBA PHARMACEUTICAL PRODUCTS, INCORTHE COCA COLA COMPANY	Summit, N. J. Atlanta, Ga. Terre Haute, Ind. Corning, N. Y. Berkeley, Calif. Detroit, Mich. Chicago, Ill. Norwich, N. Y.
CIBA PHARMACEUTICAL PRODUCTS, INCORTHE COCA COLA COMPANY	Summit, N. J. Atlanta, Ga. Terre Haute, Ind. Corning, N. Y. Berkeley, Calif. Detroit, Mich. Chicago, Ill. Norwich, N. Y. St. Paul, Minn.
CIBA PHARMACEUTICAL PRODUCTS, INCORTHE COCA COLA COMPANY	Summit, N. J. Atlanta, Ga. Terre Haute, Ind. Corning, N. Y. Berkeley, Calif. Detroit, Mich. Chicago, Ill. Norwich, N. Y. St. Paul, Minn. D. New York, N. Y.
CIBA PHARMACEUTICAL PRODUCTS, INCORTHE COCA COLA COMPANY. COMMERCIAL SOLVENTS CORPORATION CORNING GLASS WORKS. CUTTER LABORATORIES. DIFCO LABORATORIES, INCORPORATED DIVERSEY CORPORATION. EATON LABORATORIES, INCORPORATED ECONOMICS LABORATORY, INCORPORATED FISHER SCIENTIFIC CO., EIMER AND AMENIFLEISCHMANN LABORATORIES.	Summit, N. J. Atlanta, Ga. Terre Haute, Ind. Corning, N. Y. Berkeley, Calif. Detroit, Mich. Chicago, Ill. Norwich, N. Y. St. Paul, Minn. New York, N. Y. Stamford, Conn.
CIBA PHARMACEUTICAL PRODUCTS, INCOME THE COCA COLA COMPANY. COMMERCIAL SOLVENTS CORPORATION CORNING GLASS WORKS DIFCO LABORATORIES, INCORPORATED DIVERSEY CORPORATION. EATON LABORATORIES, INCORPORATED ECONOMICS LABORATORY, INCORPORATED FISHER SCIENTIFIC CO., EIMER AND AMENIFLEISCHMANN LABORATORIES. GAMMA INSTRUMENT COMPANY, INCORPOR	Summit, N. J. Atlanta, Ga. Terre Haute, Ind. Corning, N. Y. Berkeley, Calif. Detroit, Mich. Chicago, Ill. Norwich, N. Y. St. Paul, Minn. New York, N. Y. Stamford, Conn.
CIBA PHARMACEUTICAL PRODUCTS, INCOMMERCIAL SOLVENTS CORPORATION COMMERCIAL SOLVENTS CORPORATION CORNING GLASS WORKS CUTTER LABORATORIES, INCORPORATED DIVERSEY CORPORATION. EATON LABORATORIES, INCORPORATED ECONOMICS LABORATORY, INCORPORATED FISHER SCIENTIFIC CO., EIMER AND AMENIFLEISCHMANN LABORATORIES. GAMMA INSTRUMENT COMPANY, INCORPORATED GREAT NO.	Summit, N. J. Atlanta, Ga. Terre Haute, Ind. Corning, N. Y. Berkeley, Calif. Detroit, Mich. Norwich, N. Y. St. Paul, Minn. New York, N. Y. Stamford, Conn. SATED ck, Long Island, N. Y.
CIBA PHARMACEUTICAL PRODUCTS, INCORTHE COCA COLA COMPANY	Summit, N. J. Atlanta, Ga. Terre Haute, Ind. Corning, N. Y. Berkeley, Calif. Detroit, Mich. Chicago, Ill. Norwich, N. Y. St. Paul, Minn. D. New York, N. Y. Stamford, Conn. AATED KK, Long Island, N. Y. Hollywood, Florida
CIBA PHARMACEUTICAL PRODUCTS, INCOME THE COCA COLA COMPANY	Summit, N. J. Atlanta, Ga. Terre Haute, Ind. Corning, N. Y. Berkeley, Calif. Detroit, Mich. Chicago, Ill. Norwich, N. Y. St. Paul, Minn. D. New York, N. Y. Stamford, Connattel Attel Key, Long Island, N. Y. Hollywood, Florida Paterson, N. J.
CIBA PHARMACEUTICAL PRODUCTS, INCORTHE COCA COLA COMPANY. COMMERCIAL SOLVENTS CORPORATION	Summit, N. J. Atlanta, Ga. Terre Haute, Ind. Corning, N. Y. Berkeley, Calif. Detroit, Mich. Chicago, Ill. Norwich, N. Y. St. Paul, Minn. New York, N. Y. Stamford, Conn. BATED ck, Long Island, N. Y. Hollywood, Florida Paterson, N. J. Philadelphia, Pa.
CIBA PHARMACEUTICAL PRODUCTS, INCOM THE COCA COLA COMPANY	Summit, N. J. Atlanta, Ga. Atlanta, Ga. Terre Haute, Ind. Corning, N. Y. Berkeley, Calif. Detroit, Mich. Chicago, Ill. Norwich, N. Y. St. Paul, Minn. New York, N. Y. Stamford, Conn. Stamford, Conn. ATED ck, Long Island, N. Y. Hollywood, Florida Paterson, N. J. Philadelphia, Pa. Princeton, N. J.
CIBA PHARMACEUTICAL PRODUCTS, INCORTHE COCA COLA COMPANY	Summit, N. J. Atlanta, Ga. Terre Haute, Ind. Corning, N. Y. Berkeley, Calif. Detroit, Mich. Norwich, N. Y. St. Paul, Minn. New York, N. Y. Stamford, Conn. RATED ck, Long Island, N. Y. Hollywood, Florida Paterson, N. J. Philadelphia, Pa. Princeton, N. J. Nutley, N. J.
CIBA PHARMACEUTICAL PRODUCTS, INCOM THE COCA COLA COMPANY	Summit, N. J. Atlanta, Ga. Terre Haute, Ind. Corning, N. Y. Berkeley, Calif. Detroit, Mich. Norwich, N. Y. St. Paul, Minn. New York, N. Y. Stamford, Conn. SAATED Paterson, N. J. Philadelphia, Pa. Princeton, N. J. Nutley, N. J. Baltimore, Md.

International Minerals and Chemical Corporation
Chicago, Ill.
KIMBLE GLASS DIVISION, OWENS-ILLINOIS GLASS COMPANY
Toledo, Ohio
LAMBERT PHARMACAL COMPANY St. Louis, Mo.
ARTHUR S. LA PINE & Co
E. LEITZ, INCORPORATED New York, N. Y.
ELI LILLY AND COMPANY
MEINECKE AND COMPANY, INCORPORATED New York, N. Y.
MERCK AND COMPANY, INCORPORATED Rahway, N. J.
NATIONAL ANILINE DIVISION, ALLIED CHEMICAL AND DYE
Corporation
NATIONAL DAIRY RESEARCH LABORATORIES, INCORPORATED
Oakdale, Long Island, New York
NATIONAL DISTILLERS PRODUCTS CORPORATION
New York: N. Y.
NEW BRUNSWICK SCIENTIFIC CO New Brunswick, N. J.
ORTHO RESEARCH FOUNDATION
PARKE, DAVIS AND COMPANY Detroit, Michigan
Chas. Prizer and Company, Incorporated, New York, N. Y.
PITMAN-MOORE COMPANY Indianapolis, Ind.
RED STAR YEAST AND PRODUCTS COMPANY. Milwaukee, Wis.
ROCKLAND FARMS
SCHENLEY LABORATORIES, INCORPORATED Lawrenceburg, Ind.
Jos. Schlitz Brewing Company
Schwarz Laboratories, Incorporated Mount Vernon, N. Y.
JOSEPH E. SEAGRAM AND SONS, INCORPORATED LOUISVIlle, Ky.
SELAS CORPORATION OF AMERICAPhiladelphia, Pa.
SHARP AND DOHME, INCORPORATEDPhiladelphia, Pa.
SHERMAN LABORATORIES Detroit, Mich.
SMITH, KLINE & FRENCH, LABS Philadelphia, Pa.
Ivan Sorvall
E. R. SQUIBB AND SONS New Brunswick, N. J.
STANDARD SCIENTIFIC SUPPLY CORPORATION New York, N. Y.
TAKAMINE LABORATORY, INCORPORATEDClifton, N. J.
ARTHUR H. THOMAS COMPANY Philadelphia, Pa.
THE UPJOHN COMPANY Kalamazoo, Mich.
WALLERSTEIN COMPANY, INCORPORATED New York, N. Y.
WILLIAM R. WARNER AND COMPANY New York, N. Y.
WILL CORPORATION
WILLIAMS AND WILKINS COMPANY
WILLIAMS AND WILKINS COMPANY Baltimore, Md. WILMOT CASTLE COMPANY Rochester, N. Y.
WINTHROP LABORATORIES INCORPORATED New York, N. Y.
ZONITE PRODUCTS CORPORATION New York, N. Y.
ZUNITE I RODUCTS CORPORATION

BACTERIOLOGICAL REVIEWS

Manuscripts should be sent to Professor Perry W. Wilson, Department of Bacteriology, University of Wisconsin, Madison 6, Wisconsin.

One hundred reprints, without covers, of articles will be furnished gratis to contributors when ordered in advance. A table showing cost of additional reprints, with an order slip, is sent with proof.

Correspondence concerning business matters should be addressed to The Williams & Wilkins Company, Mount Royal and Guilford Avenues, Baltimore, U. S. A.

BACTERIOLOGICAL REVIEWS is issued quarterly in March, June, September, and December. The four numbers published in one calendar year constitute a volume.

The subscription price is \$5.00 per volume. Add \$.25 per volume additional postage for Canada, \$.75 per volume for all other countries. Bacteriological Reviews is delivered free, however, to all subscribers to the Journal of Bacteriology.

Claims for copies lost in the mails must be received within 30 days (domestic).

Change of address—Publisher must be notified 60 days in advance. Journals undeliverable because of incorrect address will be destroyed. Duplicates can be obtained (if available) from the publisher at the regular price of single issues.

Subscriptions should be renewed promptly—To avoid a break in your series, subscriptions should be renewed promptly. The publishers cannot guarantee to supply back issues on belated renewals.



THE WILLIAMS & WILKINS COMPANY

Publishers of Scientific Books and Periodicals

BALTIMORE, U. S. A.